

IN THE CLAIMS

Claim 1. (Currently Amended) An audio signal processing method that performs virtual acoustic image localization processing of digital audio signals based on at least one type of information among position information, movement information, and localization information of an acoustic image, the method comprising the steps of:

when there are a plurality of changes in said information within a prescribed ~~unit~~ period of time, generating single modified information at the end of said prescribed ~~unit~~ period of time based on said plurality of changes in said information; and

performing virtual acoustic image localization processing for said digital audio signals based on said generated single modified information,

wherein said prescribed ~~unit~~ period of time is an integral multiple of the sampling period of said digital audio signals.

Claim 2. (Currently Amended) The audio signal processing method according to Claim 1, wherein

the step of generating said single modified information is performed using only said information presented last within said prescribed period~~unit~~ of time.

Claims 3-11. (Canceled)

Claim 12. (Previously Presented) The audio signal processing method according to Claim 1, wherein
said information for said digital audio signals can be modified according to user operations.

Claim 13. (Currently Amended) An audio signal processing method that performs virtual acoustic image localization processing for digital audio signals having at least one type of information among position information, movement information and localization information of an acoustic image, based on said information, the method comprising the steps of:

when a plurality of said information elements are contained within a prescribed period~~unit~~ of time, generating single modified information at the end of said prescribed period ~~unit~~ of time based on said plurality of said information elements;
and

performing virtual acoustic image localization processing for said digital audio signals based on said generated single modified information,

wherein said prescribed period ~~unit~~ of time is an integral multiple of the sampling period of said digital audio signals.

Claim 14. (Currently Amended) The audio signal processing method according to Claim 13, wherein

said step of generating a single information change is performed using only a last one of said plurality of said information elements presented within said prescribed ~~unit~~period of time.

Claims 15-23. (canceled)

Claim 24. (Original) The audio signal processing method according to Claim 13, wherein

said information possessed by said audio signals can be modified according to user operations.

Claim 25. (Currently Amended) An audio signal processing method in which, when a plurality of information changes of at least one information type among position information, movement information, and localization information of an acoustic image are applied to digital audio signals within a prescribed

~~unit~~period of time, the method comprising the steps of:

generating single modified information at the end of said prescribed ~~unit~~period of time based on said plurality of information changes;

performing virtual acoustic image localization processing in advance on said audio signals based on a plurality of

localization positions of the digital audio signals and
producing a plurality of synthesized audio signals;

and based on the generated single modified information,
reading out from storage means, in which are stored the
plurality of synthesized audio signals obtained from the
localization processing, at least one of said synthesized audio
signals,

wherein said prescribed ~~unit~~period of time is an integral
multiple of the sampling period of said digital audio signals.

Claim 26. (Currently Amended) The audio signal processing
method according to Claim 25, wherein

said step of generating a single modified information is
performed using only a last one of said information elements
presented within said prescribed ~~unit~~period of time.

Claims 27-35. (canceled)

Claim 36. (Previously Presented) The audio signal
processing method according to Claim 25, wherein

said information possessed by said digital audio signals
can be modified according to user operations.

Claim 37. (Currently Amended) An audio apparatus,
comprising

an audio signal processing unit for performing virtual acoustic image localization processing of digital audio signals based on at least one information type among position information, movement information, and localization information of an acoustic image thereon; and

information change generation means for generating, when a plurality of changes are made to said information within a prescribed time ~~unit~~period, single modified information within said prescribed time ~~unit~~period based on said plurality of information changes, wherein

said audio processing unit is controlled, based on the single modified information generated by said information change generation means, to perform virtual acoustic image localization processing of said digital audio signals,

wherein said prescribed ~~unit~~period of time is an integral multiple of the sampling period of said digital audio signals.

Claim 38. (Currently Amended) An audio signal processing apparatus, comprising:

an audio processing unit for performing virtual acoustic image localization processing of digital audio signals, having at least one type of information among position information, movement information, and localization information of an acoustic image, associated with time information and/or event information, based on said information; and

information change generation means for generating, when there are a plurality of said information changes within a prescribed time ~~unit~~period, single modified information at the end of said prescribed time ~~unit~~period based on said plurality of information changes, wherein

said audio processing unit is controlled, based on the single modified information generated by said information change generation means, to perform virtual acoustic image localization processing of said digital audio signals,

wherein said prescribed ~~unit~~period of time is an integral multiple of the sampling period of said digital audio signals.

Claim 39. (Currently Amended) An audio signal processing apparatus, comprising:

an information change generation means for generating, when a plurality of changes in at least one type of information for digital audio signals among position information, movement information, and localization information of an acoustic image are requested within a prescribed time ~~unit~~period, single modified information at the end of said prescribed time ~~unit~~period based on said plurality of information changes; and

storage means for storing a plurality of synthesized audio signals obtained from the localization processing, wherein

virtual acoustic image localization processing is performed in advance on said digital audio signals based on a plurality of

localization positions of the digital audio signals, and based on said single modified information generated by said information change generation means, from said storage means in which are stored the plurality of synthesized audio signals obtained from this localization,

wherein said prescribed ~~unit~~period of time is an integral multiple of the sampling period of said digital audio signals.